

WHAT IS CLAIMED IS:

1. A combined semiconductor apparatus comprising:
a semiconductor substrate having an integrated circuit;
a planarized region formed in a surface of said semiconductor substrate; and
a semiconductor thin film including at least one semiconductor device and bonded on said planarized region.
2. The combined semiconductor apparatus according to claim 1, wherein said planarized region is a part of said surface of said semiconductor substrate which has been subjected to a planarizing process.
3. The combined semiconductor apparatus according to claim 1, wherein said planarized region is disposed above said integrated circuit of said semiconductor substrate.
4. The combined semiconductor apparatus according to claim 1, wherein said planarized region is disposed in a region of said semiconductor substrate adjacent to said integrated circuit of said semiconductor substrate.
5. The combined semiconductor apparatus according to claim 1, further comprising a planarized film disposed between said planarized region and said semiconductor thin film, wherein a surface of said planarized film on a side of said semiconductor thin film has been subjected to a planarizing process.
6. The combined semiconductor apparatus according to claim 5, wherein said planarized film includes:
an electrically conductive layer; and

an interdielectric layer formed in a region peripheral to said electrically conductive layer.

7. The combined semiconductor apparatus according to claim 1, wherein a first surface of said semiconductor thin film, in which said semiconductor device is formed, is disposed on a side of said planarized region of said semiconductor substrate.

8. The combined semiconductor apparatus according to claim 7, wherein said semiconductor thin film includes a common electrode layer on a second surface of said semiconductor thin film opposed to said first surface, and said integrated circuit has a common electrode terminal; said apparatus further comprising a common interconnecting layer formed on a region extending from an upper surface of said common electrode layer of said semiconductor thin film to said common electrode terminal of said integrated circuit.

9. The combined semiconductor apparatus according to claim 1, wherein said semiconductor thin film has a common electrode layer on a second surface of the semiconductor thin film opposed to a first surface of the semiconductor thin film, in which said semiconductor device is formed, and said second surface of said semiconductor thin film is disposed on a side of said planarized region of said semiconductor substrate.

10. The combined semiconductor apparatus according to claim 9, wherein said integrated circuit includes individual electrode terminals; said apparatus further comprising individual interconnecting lines formed on a region extending from an

upper surface of said semiconductor device to said individual electrode terminal.

11. A combined semiconductor apparatus comprising:
a semiconductor substrate;
an integrated circuit device disposed on said semiconductor substrate;
a raised layer formed on a surface of said semiconductor substrate in a region adjacent to said integrated circuit device, an upper surface of said raised layer being at a position higher than an upper surface of said integrated circuit device; and
a semiconductor thin film bonded on the upper surface of said raised layer.

12. A combined semiconductor apparatus comprising:
a semiconductor substrate having an integrated circuit; and
a semiconductor thin film including at least one semiconductor device and bonded on said semiconductor substrate;
wherein a first surface of said semiconductor thin film, in which said semiconductor device is formed, is disposed on a side of said semiconductor substrate.

13. The combined semiconductor apparatus according to claim 12, further comprising an electrically conductive layer disposed between said semiconductor substrate and said semiconductor thin film.

14. The combined semiconductor apparatus according to claim 13, further comprising an interdielectric layer disposed between said semiconductor substrate and said semiconductor thin film and in a region peripheral to said

electrically conductive layer.

15. The combined semiconductor apparatus according to claim 12, wherein said semiconductor thin film includes a common electrode layer on a second surface of said semiconductor thin film opposed to said first surface, and said integrated circuit has a common electrode terminal;

said apparatus further comprising a common interconnecting layer formed on a region extending from an upper surface of said common electrode layer of said semiconductor thin film to said common electrode terminal of said integrated circuit.

16. The combined semiconductor apparatus according to claim 1, wherein said semiconductor thin film is made of compound semiconductor as a main materials.

17. The combined semiconductor apparatus according to claim 1, wherein said at least one semiconductor device is any of a light-emitting element, a light-sensing element, a Hall element and a piezoelectric element, and said integrated circuit includes a driving-IC for driving said at least one semiconductor device.

18. The combined semiconductor apparatus according to claim 1, wherein said at least one semiconductor device is a plurality of said semiconductor devices arranged in said semiconductor thin film.

19. The combined semiconductor apparatus according to claim 1, wherein said at least one semiconductor device is a single semiconductor device disposed in said semiconductor thin film.

- 20. An optical print head including the combined semiconductor apparatus of claim 1.
- 21. An optical print head including the combined semiconductor apparatus of claim 11.
- 22. An optical print head including the combined semiconductor apparatus of claim 12.
- 23. An image-forming apparatus comprising at least one optical print head including the combined semiconductor apparatus of claim 1.
- 24. An image-forming apparatus comprising at least one optical print head including the combined semiconductor apparatus of claim 11.
- 25. An image-forming apparatus comprising at least one optical print head including the combined semiconductor apparatus of claim 12.